A white background with black text

Description automatically generated with low confidence

**Knowledge Organiser**

Year 4

Electricity

VOCABULARY

**Electricity-** form of energy formed by charged particles.

**Circuit-** a complete flow of electricity and the way it affects objects.

**Bulb**- provides light when powered.

**Mains**- domestic or wall powered.

**Plug**- device for making an electrical connection

**Buzzer**- An electrical device that makes a buzzing sound.

**Wire**- A long piece of metal that carries an electrical current often covered in plastic for safety.

**Motor**- A device that changes electrical energy into movement.

**Cell**- a device used to generate electricity.

**Battery**- More than one cell/

**Conductor-** Any material that electricity can pass through or along.

**Insulator-** Any material that electricity cannot pass through or along.

**Symbol-** Representation of the components.

**Electrons-** move around a circuit.

**Current-** stream of charged particles moving though an electrical conductor.

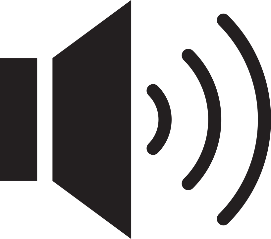
**Voltage-** An electrical force that makes electricity move through a wire, measured in volts (V)

**r**

Electricity can produce…

The battery produces electricity. It has stored chemical energy.

The chemical energy converts to electrical energy which produces electrons. They travel around the circuit to all the components.

nnh

Movement

Sound

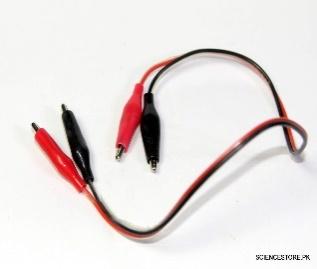
Light

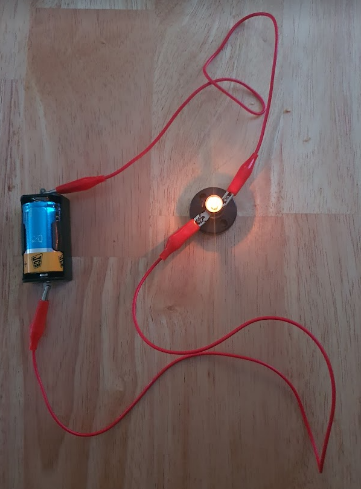
Heat

Circuit Components

Simple Circuit

A picture containing black, tool

Description automatically generated



This is a simple circuit. It is a complete circuit where electrons can flow around the circuit.



Bulb/Lamp

Wires

Buzzer



Cell

Battery



Switch

Motor

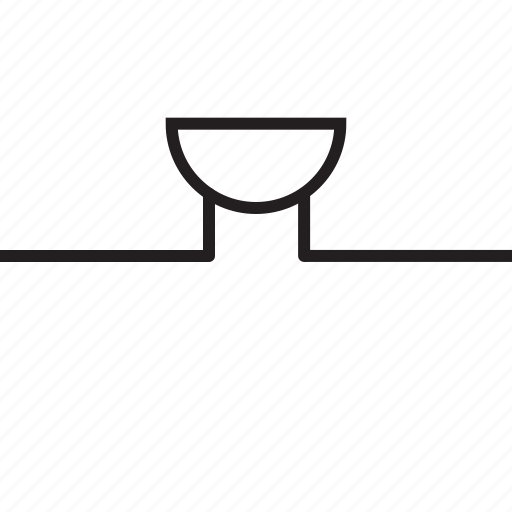
A white background with black text

Description automatically generated with low confidence

Year 4

Electricity

Scientific Diagrams and Symbols

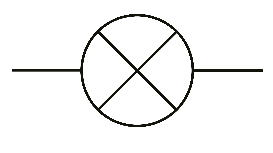


Diagram

Description automatically generated

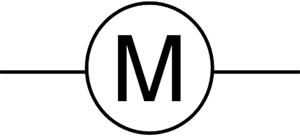
Bulb

A picture containing electronics

Description automatically generated

Cell

Switch



Wires

Bulb

Buzzer





Motor

Cell

Logo

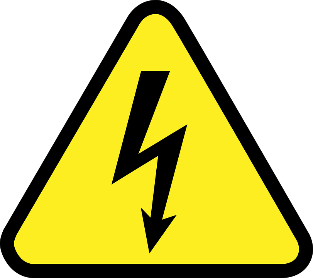
Description automatically generated with medium confidenceLogo

Description automatically generated with medium confidenceLogo

Description automatically generated with medium confidenceLogo

Description automatically generated with medium confidenceLogo

Description automatically generated with medium confidenceA picture containing group, dark, close

Description automatically generated

Switch

Science Capital

Alessandro Volta

He discovered the first practical method of making electricity.

Michael Faraday

First person to discover that moving a magnet near a coil of copper wire introduced an electric current in a wire.

Thomas Edison

He developed many devices including the early version of the electric light bulb.

1956- Nuclear Power

1941- Solar Power

2000- Wave Power